PEER-REVIEW REPORT

Name of journal: World Journal of Gastrointestinal Oncology

Manuscript NO: 68905

Title: Diagnostic value of four serum exosome miRNAs panel for the detection of colorectal cancer

Reviewer's code: 06110610

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: Germany

Author's Country/Territory: China

Manuscript submission date: 2021-06-10

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-06-14 23:57

Reviewer performed review: 2021-06-15 02:31

Review time: 2 Hours

Scientific quality	[　] Grade A: Excellent　[Y] Grade B: Very good　[　] Grade C: Good [　] Grade D: Fair　[　] Grade E: Do not publish
Language quality	[　] Grade A: Priority publishing　[Y] Grade B: Minor language polishing [　] Grade C: A great deal of language polishing　[　] Grade D: Rejection
Conclusion	[　] Accept (High priority)　[　] Accept (General priority) [Y] Minor revision　[　] Major revision　[　] Rejection
Re-review	[　] Yes　[Y] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous　[　] Onymous Conflicts-of-Interest: [　] Yes　[Y] No

SPECIFIC COMMENTS TO AUTHORS

Colorectal cancer (CRC) is a common malignant tumor and the 5-year survival rate was only 12%. Early detection, early diagnosis and early treatment are currently accepted methods that can effectively improve the efficacy of CRC treatment. However, the commonly used early diagnosis method of CRC is still insufficient at present. A minimally invasive or non-invasive, sensitive and accurate early diagnosis method is urgently needed in clinical practice. Exosomes, as tumor molecular markers, have the advantages of protecting the nucleic acids in them and having good specificity, but their extraction methods and identification methods have low efficiency. In the present study, authors evaluated four serum exosome miRNAs which were miR-15b, miR-16, miR-21, miR-31. By binary logistic regression analysis, they have built and validate the diagnostic model which contain miR-15b, miR-21 and miR-31 panel for discriminating healthy control group and colorectal cancer group, the sensitivity and specificity were 95.06% and 94.44%. miR-15b, miR-16 and miR-21 panel for discriminating colorectal adenoma group and colorectal cancer group, the sensitivity and specificity were 85.19% and 82.09%. Based on their findings, the exosome four miRNAs were demonstrated to have potential diagnostic value in serum for colorectal cancer. The experiment of the study is designed very well, aims are very clear. Methods are reasonable. Data in figures and tables are very good, and well discussed. Specific comments: a. In my opinion, for the Patient sample in the material and method section, there is actually no need to list demographic data, because it belongs to the content of the results section. In addition, this part can also add a table to list the basic demographic data, which will make the presentation of the results clearer. b. Please make the inclusion and exclusion criteria more systematically.

PEER-REVIEW REPORT

Name of journal: World Journal of Gastrointestinal Oncology

Manuscript NO: 68905

Title: Diagnostic value of four serum exosome miRNAs panel for the detection of colorectal cancer

Reviewer's code: 06110798

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: Viet Nam

Author's Country/Territory: China

Manuscript submission date: 2021-06-10

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-06-14 23:57

Reviewer performed review: 2021-06-15 03:54

Review time: 3 Hours

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[ ] Grade A: Priority publishing [Y] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [ ] Accept (General priority) [Y] Minor revision [ ] Major revision [ ] Rejection
Re-review	[Y] Yes [ ] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

Manuscript Title: Diagnostic value of four serum exosome miRNAs panel for the detection of colorectal cancer. 1- Title reflected the main subject/hypothesis of the manuscript. 2- The abstract summarized and reflect the described in the manuscript. 3- Five keywords reflected the theme of the manuscript. 4- The manuscript adequately described the background, presented status and significance of the study. 5- The manuscript described Materials and methods (e.g., Patient sample, Serum exosomes extraction and identification, Serum exosome miRNA detection, and Statistical analysis, etc.) in adequate detail. I suggest that the main demographic information could be presented in a table so that it is clearer. 6- The research objectives are achieved by the experiments used in this study. This study evaluated four serum exosome miRNAs which were miR-15b, miR-16, miR-21, miR-31. By binary logistic regression analysis, authors have built and validate the diagnostic model which contain miR-15b, miR-21 and miR-31 panel for discriminating healthy control group and colorectal cancer group. 7- The manuscript interpreted the findings adequately and appropriately, highlighting the key points concisely, clearly and logically. They concluded that the sensitivity and specificity were 95.06% and 94.44%. miR-15b, miR-16 and miR-21 panel for discriminating colorectal adenoma group and colorectal cancer group, the sensitivity and specificity were 85.19% and 82.09%. 8- Manuscript included sufficient, good quality Tables. 9- The manuscript cited appropriately the latest, important and authoritative references in the introduction and discussion sections. 10- The manuscript is well, concisely and coherently organized and presented and the style, language and grammar are accurate and appropriated.

PEER-REVIEW REPORT

Name of journal: World Journal of Gastrointestinal Oncology

Manuscript NO: 68905

Title: Diagnostic value of four serum exosome miRNAs panel for the detection of colorectal cancer

Reviewer's code: 06110746

Position: Peer Reviewer

Academic degree: MD

Professional title: Professor

Reviewer's Country/Territory: Japan

Author's Country/Territory: China

Manuscript submission date: 2021-06-10

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-06-14 23:57

Reviewer performed review: 2021-06-15 03:56

Review time: 3 Hours

Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [Y] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[ ] Grade A: Priority publishing [Y] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [ ] Accept (General priority) [Y] Minor revision [ ] Major revision [ ] Rejection
Re-review	[ ] Yes [Y] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

This Observational Study aimed to evaluate the diagnostic value of colorectal cancer by detecting the exosome four miRNAs - miR-15b, miR-16, miR-21, miR-31. According to their results, the diagnostic model may serve as a novel diagnostic model for colorectal cancer. The article is written with the good English-speaking adduction of the arguments. Manuscript is sufficiently novel and very interesting to warrant publication. The Results are presented clearly and authors made a detailed an informative discussion of the results. I have a minor suggestion, authors can present some results in Tables. Sincerely